Part 8 · Number Search & Magic Square

Work out each answer below, then find it hidden in the digit grid — across, down, diagonally or backwards.

1. Discriminant of $x^2+7x-60=0$
2. Discriminant when $a=1, b=13, c=0$
3. The positive constant term in $x^2+7x-60=0$
4. Sum of the two numbers whose product is 182
5. Distance (m) of the pole from gate B
6. Distance (m) of the pole from gate A
7. Length (m) of the plot in the "area 528 m²" problem
8. Carpet area (m²) of the prayer hall in Section 4.1

3	2	1	9	8	9	0	5	0	4	9	5
4	2	6	4	8	2	4	4	2	6	0	5
8	0	6	4	8	4	8	6	6	2	4	9
2	0	5	6	9	0	4	9	9	8	8	8
8	0	6	8	6	1	5	1	7	5	1	6
9	3	6	0	3	8	3	6	0	1	7	3
2	0	8	6	5	2	5	5	3	7	0	1
9	6	1	8	2	3	1	0	3	6	1	2
9	7	0	1	7	8	2	9	4	7	7	1
5	1	6	9	4	1	0	2	8	5	1	5
1	2	2	0	9	6	4	2	0	1	7	2
1	3	5	1	3	8	4	7	1	2	0	4

☐ 289	☐ 169	☐ 300	☐ 60	☐ 27
☐ 12	☐ 40	☐ 5		

Magic Square — every row, column and diagonal adds to the same total.

	1	
	5	**7**
4		**2**

Magic constant: 15. Fill the empty cells.

You can now recognise a quadratic equation in disguise, solve it by factorisation, and — without solving at all — predict how many real roots it has just from the discriminant. That is the whole chapter in one sentence. ✔